



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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Ref: EPR-N

JUL 05 2011

Nicholas J. Stas  
Environmental Manager  
Western Area Power Administration  
Department of Energy  
P.O. Box 35800  
Billings, MT 59107-5800

Re: Final Environmental Impact Statement (EIS) for  
Modification of Groton Generation Station  
Interconnection Agreement, CEQ # 20110175

Dear Mr. Stas:

The U.S. Environmental Protection Agency (EPA) Region 8 has reviewed the Final EIS for the Modification of the Groton Generation Station Interconnection Agreement. We provide our comments in accordance with our review responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. 4332(2)(C), and Section 309 of the Clean Air Act, 42 U.S.C. 7609.

Basin Electric Power Cooperative (Basin Electric) has requested the Western Area Power Administration (Western) eliminate the operating limit from their Large Generator Interconnection Agreement (LGIA) for the Groton Generation Station, located approximately five miles south of Groton, South Dakota. The current operating limit imposed by Western prevents Basin Electric's production at the Groton Generation Station from exceeding 50 MW on an average annual basis. The Station's maximum production capability is 100 MW; however, this full capacity would not be available to the plant because it would result in violation of its Clean Air Act permit. Elimination of Western's operating limit, the preferred alternative, will result in the Clean Air Act permit becoming the new effective cap on its generation capabilities and an approximate 70% increase in both carbon dioxide production and water usage based on Table 2.6-1. Correspondingly, an increase in air emissions is also expected.

In our review of the Draft EIS, EPA identified several recommendations for additional consideration and disclosure in the Final EIS. Our overarching comment was to more fully characterize the impacts of the proposed action. We also recommended evaluation of all reasonable alternatives; clarifications, updates, and revisions to the discussion of greenhouse gas emissions, their impacts, and opportunities for mitigation; further characterization of the project need and inclusion of a description of the original basis for the operating limit in the LGIA; a description of the analysis and criteria which substantiate the conclusion that cumulative air impacts will not exceed significance criteria; and a discussion of potential indirect impacts. We appreciate the addition of a section on environmental justice, which discloses some information on low-income and minority populations within the project area and South Dakota as a whole.

The FEIS addressed some of the air quality concerns by including the modeling done for the air quality permit. Western's response does not address our comment regarding 1-hour NO<sub>2</sub> as it does not fully disclose the NO<sub>2</sub> impacts. We continue to recommend disclosure of 1-hour NO<sub>2</sub> analysis from the proposed facility's NO<sub>2</sub> emissions in order to characterize the impacts of this project under NEPA.

In the Final EIS, Western states that it will not fully analyze greenhouse gas capture and sequestration and demand-side management because they are outside the scope of Western's decision and its purpose and need. NEPA requires consideration of a reasonable range of alternatives that may be outside of the applicant's or the agency's jurisdiction and consideration of mitigation for the impacts of an action. Consequently, consideration of alternatives to the elimination of the operating limit or possible mitigation for the effects of the preferred alternative is not outside the scope of NEPA consideration.

We appreciate that Western has included an estimate of greenhouse gas emissions as carbon dioxide equivalents in the Final EIS, but note that it did not consider mechanisms to offset the impacts of the substantial increase in greenhouse gas emissions. The current actual emissions are 25,568 metric tonnes, the current allowable emissions are 187,322 metric tonnes, and the proposed allowable limits are 318,098 metric tonnes carbon dioxide-equivalents (Table 2.4-2). Groton Generation Station's contribution to the South Dakota's total carbon dioxide emissions was 9.64% in 2005 (page 4-8). While Western describes capture and sequestration of greenhouse gases from natural gas-fired combustion turbines as technically infeasible, capture and sequestration is only one mechanism to mitigate for the impacts of increased power generation and resulting greenhouse gas production. We continue to encourage Western to consider other mechanisms such as emission reduction or improved efficiency at the generation station, carbon offsets, investment in transmission lines for renewable energy, and the addition of renewable energy sources and increased energy efficiency beyond that required by state law.

In response to our request for additional information describing the basis for the original LGIA and the need for the project, Western describes Department of Energy (DOE) regulations as the basis for the 50 MW operating limit imposed at the time of the original interconnect in 2003. Above a 50 MW generating threshold, a generating project must undergo EIS analysis per DOE regulations. It appears that by imposing a limit of 50 MW, Western achieved consistency with the 2003 Power Supply Analysis. It remains unclear as to what change since the 2003 Power Supply Analysis prompted the need for a new generating limit. Clarification of this point would provide greater understanding of the proposed action.

An addition to Section 1.2 states "With the removal of the operating limitation, the Groton Generation Station does not gain any additional peaking generation capability during peak load conditions; it allows the facility to operate more hours to either backup/firm up wind generation or during periods that it is economical to operate the facility." This statement appears to represent a new category of a need (redundancy and operational flexibility) for the project. Western also added language was added to Section 1.2 describing the co-location and interconnection of Groton Station to the 99 MW Day County Wind Project. The previous description of need, still retained in the document, is "the need for an additional peaking resource to serve projected additional member load growth...during increasingly heavy electrical use times in every consumer class, primarily during summer months... (Section 1.2)." The need for the project is still unclear but appears to have been expanded. We recommend Western clarify the need for the project in the Record of Decision (ROD).

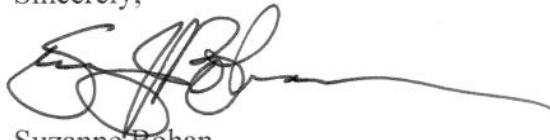
EPA recommended Western address whether increased natural gas production or coal gasification will

occur as an indirect effect from the project. Western's response implies that Dakota Gasification's Great Plains Synfuels Plant, which supplies Groton, is currently producing at capacity. It states that no additional gas will be produced by Dakota Gasification Company's Great Plains Synfuels Plant to operate the Groton Generation Station. If this is the case, then an indirect impact would be reduced natural gas availability for Dakota Gasification Company's other customers. We encourage disclosure and consideration of this potential indirect effect, i.e., reduced availability of synthetic natural gas.

Although Groton's additional withdrawals from the Missouri River are small compared to the overall volume of Lake Oahe, the nature of a cumulative effect is that the incremental effect associated with a project may be small but may still have an effect when combined with other effects, possibly distinct in time or space. We continue to recommend disclosure of the temperature impairments in Lake Sharpe, along with acknowledgement that additional withdrawals, although small, may cumulatively contribute to this impairment unless demonstrated otherwise.

We appreciate your review and consideration of our comments as you move forward in development of a ROD. If you have any questions regarding our comments, please contact me at 303-312-6925 or Maggie Pierce of my staff at 303-312-6550.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. Bohan', with a long horizontal line extending to the right.

Suzanne Bohan  
Acting Director, NEPA Compliance and Review Program  
Office of Ecosystems Protection and Remediation



